



National Aeronautics and  
Space Administration

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**NASA EARTH SYSTEM SCIENCE  
FELLOWSHIP PROGRAM**

*(Formerly the Global Change Research Fellowship Program and the Earth Science  
Graduate Student Research Program)*



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Proposals Due March 15, 1999

# **NASA Graduate Student Fellowships In Earth System Science**

## **Introduction**

NASA announces graduate student training fellowships for persons pursuing Master of Science (M.Sc.) or Doctoral (Ph.D.) degree in Earth System Science. The purpose is to ensure continued training of interdisciplinary scientists to support the study of the Earth as a system. These fellowships will be available for the 1999/2000 academic year. Over 400 Ph.D. and M.Sc. fellowships have been awarded since the inception of the program in 1990.

This is the fourth year that NASA is combining the financial support for the Earth science portion of its Graduate Student Researchers Program (GSRP), supported by the NASA Education Division, and the Graduate Student Fellowship in Global Change Research, supported by the Office of Mission to Planet Earth, to fund both M.Sc. and Ph.D. applicants pursuing their graduate studies in the field of Earth system science. The NASA Education Division will award 4-8 new M.Sc. fellowships and the Office of Mission to Planet Earth will award up to 40 new Ph.D. fellowships for the 1999/2000 academic year.

## **Scientific Areas of Support**

Applications will be considered for research in atmospheric chemistry and physics, ocean biology and physics, ecosystem dynamics, hydrology, cryospheric processes, geology, geophysics, and information science and engineering, provided that the specific research topic is relevant to NASA's Earth remote sensing science, process studies, modeling and analysis in support of the U.S. Global Change Research Program (USGCRP). NASA discourages submission of paleo-climate related applications to this program. Additional information about the ESE and the Earth Observing System (EOS) scientific priorities can be obtained from the MTPE Strategic Plan <http://www.earth.nasa.gov/> and EOS science publications [http://eosps0.gsfc.nasa.gov/eos\\_homepage/scipubs.html](http://eosps0.gsfc.nasa.gov/eos_homepage/scipubs.html).

## **Terms and Conditions**

Awards are made initially for one year and may be renewed annually, no more than two additional years for a total of three years, based on satisfactory progress as reflected in academic performance and evaluations by the faculty advisor. Three years is the maximum support a student may receive in pursuing M.Sc. and/or Ph.D. degree(s). For example, a student who has been supported for three years to obtain her/his M.Sc. degree cannot apply for additional three years of Ph.D. support. However, for students who are in the second or third year of their M.Sc. program may use the balance of the three years of support remaining to complete their M.Sc. degree and to initiate their Ph.D. research. In either case, the maximum period of support is three years. The amount of award is \$22,000/annum, which may be used to defray student's stipend, living and educational expenses, travel expenses to scientific conferences, tuition, and fees.

## **Eligibility**

Students admitted to or already enrolled in a full-time M.Sc. and/or Ph.D. program at accredited U.S. universities are eligible to apply. Students may enter the program at any time during their graduate work. Students may also apply in their senior year prior to receiving their baccalaureate degree, but must be admitted and enrolled in a M.Sc. and/or Ph.D. program at a U.S. university at the time of the award. An individual accepting this award may not concurrently receive other Federal funds, including funds from other Federal fellowships, traineeships. However, NASA may allow an applicant receiving Fellowship Supplements from other U.S. Federal agencies to cover expenses not covered by NASA's educational fellowships. A notable example is the purchase of equipment, which is not permitted by NASA.

Fellowships but is covered by the National Science Foundation Graduate Student Supplemental Fellowships. United States citizens and resident aliens will be given preference, although the program is not restricted to them. Students with disabilities and from underrepresented minority groups are urged to apply. No applicant shall be denied consideration or appointment as a NASA Earth System Science Fellow on grounds of race, creed, color, national origin, age, or sex.

### **Obligation to the Government**

A student receiving support under the Earth System Science Fellowship program does not thereby incur any formal obligation to the Government of the United States. However, the objectives of this program will clearly be served best if the student is encouraged to actively pursue research or teaching in the field of Earth system science after completion of graduate studies.

### **Disposition of Unused Funds**

In case a student or faculty advisor ceases to participate in the program for any reason, the university with prior NASA approval may appoint another student or faculty advisor to complete the remaining portion of the grant period provided the area of research remains the same. Beyond the remaining grant period, the new recipient must submit a complete application to NASA to be evaluated with other new applicants in the following year's fellowship announcement cycle.

### **Selection of Proposals**

Proposals will be judged by NASA Headquarters on a competitive basis. Criteria for selection include: (a) academic excellence as based on applicant's transcripts and a letter of reference by student's academic advisor; (b) the quality of the proposed research; and (c) the relevance of the proposed research to NASA's role in the U.S. Global Change Research Program (Mission to Planet Earth) as outlined above. Evaluation panels will include representation from the academic community, NASA's Office of Earth Science and Education Division, and professional societies in the Earth sciences.

### **Application Procedures for New Students**

Applicants are required to submit one original and seven (7) copies of: (a) a completed application form; (b) a titled five-page research proposal; (c) a short abstract (one-half page) describing the proposed research; (d) copies of undergraduate and graduate transcripts; (e) recommendation letter from the academic advisor; (f) a schedule stating the proposed start date and completion date of your degree; and (g) a completed budget form.

**All new application packages must also include:** (1) debarment and suspension certifications; and (2) drug-free workplace certification from the university. These two forms can be obtained from your university's office of sponsored research program or office of grants and contracts.

### **Application Procedures for Renewal Students**

Renewal applicants are required to submit one original and two (2) copies of: (a) a completed application form; (b) a progress report; (c) recent transcripts (d); recommendation letter from the academic advisor; (e) updated schedule for completion of your degree program; and (f) a completed budget form.

**All renewal application packages must also include:** (1) debarment and suspension certifications; and (2) drug-free workplace certification from the university. These two forms can be obtained from your university's office of sponsored research program or office of grants and contracts.

The package should be forwarded to the following address. It is the student's responsibility to ensure that these documents are received at NASA Headquarters by the **March 15, 1999 deadline**. Applications not submitted and completed by the deadline will not be considered in the review and selection process.

**Materials should be submitted to:**

Earth System Science Fellowship Program  
Code Y  
400 Virginia Avenue SW, Suite 700  
Washington, DC 20024

Results of the competition will be announced by **June 30** of each year, with anticipated starting date of awarded fellowships to be **September 1** of each year. Results will be mailed to students' university address, unless requested in writing to be forwarded to an alternate address.

## **Privacy Act Statement**

### **General**

Pursuant to Public Law 93-579, Privacy Act of 1974, as amended (5 U.S.C. 552a), the following information is being provided to persons who are asked to provide information to obtain a NASA Graduate Student Fellowship.

### **Authority**

This information is collected under the authority of the National Aeronautics and Space Act. Publication 85-568, as amended, 42 U.S.C. 2451, et. seq.

### **Purpose and Uses**

The information requested on the application form will be used to determine your eligibility for participation in the NASA Graduate Student Fellowship Program. The information requested regarding your disability status will be used to determine the degree to which members of each ethnic/racial/disability group are being reached by NASA's announcement of this program, and will not affect your application. Additionally, NASA may disclose this information to other organizations or individuals having relationships with NASA, including but not limited to academic organizations, non-profit organizations, and other governmental agencies, as well as Congressional offices in response to an inquiry made on your behalf. Disclosure may also be made to concerned parties in the course of litigation, to law enforcement agencies, and to other Federal agencies in exchanging information pertinent to an agency decision.

### **Effects of Nondisclosure**

Furnishing the information on the application form is voluntary, but failure to do so may result in NASA's inability to determine eligibility for participation and selection for award in the Graduate Student Fellowship Program. However, your application will not be affected if you choose not to provide information on your ethnic, racial, or disability status.

### **Definitions for Applicant Background - Section VI**

American Native or Alaskan American: A Person having origins in any of the original peoples of North America and who maintains cultural identification through tribal affiliation or community recognition.

Hispanic: A person of Mexican, Puerto Rican, Cuban, or South American or other Spanish culture or origin, regardless of race.

Asian: A person having origins in any of the original peoples of East Asia, Southeast Asia or the Indian subcontinent. This area includes, for example, China, India, Indonesian, Japan, Korea and Vietnam.

Pacific Islander: A person having origins in any of the original peoples of Hawaii; the U.S. Pacific territories of Guam, American Samoa, and the Northern Marianas; the U.S. Trust Territory of Palau; the islands of Micronesia and Melanesia; or the Philippines.

African American, nor of Hispanic origin: A person having origins in any of the black racial groups of Africa.

White, not of Hispanic Origin: A person having origins in any of the original peoples of Europe, North Africa, or the Middle East.

Individuals with Disabilities: An individual having a physical or mental impairment that substantially limits one or more major life activities; who has a record of such impairment; or who is regarded as having such impairment.

**PROPOSALS DUE March 15, 1999**  
*NASA Earth System Science Fellowship Program • Application Form*

**I. Student Information**

Name: (Mr./Ms.) \_\_\_\_\_

\_\_\_\_\_  
Last First MI

Birth Date: \_\_\_\_\_

Birthplace: \_\_\_\_\_

Permanent Address: \_\_\_\_\_

\_\_\_\_\_

Home Phone: \_\_\_\_\_

Citizenship: \_\_\_\_\_

Expected Degree Completion Date: \_\_\_\_\_

Campus Address: \_\_\_\_\_

Department: \_\_\_\_\_

Mail Code: \_\_\_\_\_

University: \_\_\_\_\_

Street Address: \_\_\_\_\_

City, State, ZIP: \_\_\_\_\_

Campus Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

E-Mail: \_\_\_\_\_

Undergraduate GPA: \_\_\_\_\_ Out Of \_\_\_\_\_

Field of Study: \_\_\_\_\_

Graduate GPA (If Applicable): \_\_\_\_\_ Out Of: \_\_\_\_\_

Field of Study: \_\_\_\_\_

**II. Faculty Advisor Information**

Name: \_\_\_\_\_

Campus Address: \_\_\_\_\_

Department: \_\_\_\_\_

Mail Code: \_\_\_\_\_

University: \_\_\_\_\_

Street Address: \_\_\_\_\_

City, State, ZIP: \_\_\_\_\_

Campus Phone: \_\_\_\_\_ Fax : \_\_\_\_\_

E-Mail: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**III. Official Responsible for Committing Institution**

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Department: \_\_\_\_\_

University: \_\_\_\_\_

Street Address: \_\_\_\_\_

City, State, ZIP: \_\_\_\_\_

Campus Phone: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**IV. Proposal Information**      ☐ New      ☐ Second Year      ☐ Third Year

Applicable Area of Science Priority (check only one category)

Degree Program:      ☐ M. Sc.      ☐ Ph.D.

☐ Global Carbon Cycle

☐ Global Water and Energy Cycle

☐ Climate Variability and Prediction

☐ Atmospheric Chemistry

☐ Solid Earth Science

☐ Interdisciplinary Integration

Proposal Title (not to exceed 260 characters): \_\_\_\_\_

\_\_\_\_\_

**V. Submission Checklist (incomplete files will not be considered for new award)**

**New Awards**

☐ Application Form

☐ Research Proposal (5–6 pages)

☐ Abstract

☐ Transcripts

☐ Recommendation Letter

☐ Degree Plan

☐ Certifications

☐ Budget Form

**Renewal Awards**

☐ Application Form

☐ Progress Report

☐ Recommendation Letter

☐ New Transcripts

☐ Updated Degree Plan

☐ Certifications

☐ Budget Form

**VI. Applicant Background (check each that applies)**

☐ Male

☐ American Native

☐ Hispanic

☐ Pacific Islander

☐ White, not Hispanic

☐ Female

☐ or Alaskan American

☐ Asian

☐ African American

☐ Individual with Disabilities

I certify that I am or will be a full-time graduate student enrolled at an accredited U.S. university during the period covered in the attached proposal.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

# Budget Form

Student Name: \_\_\_\_\_ Date of Birth: \_\_\_\_\_  
Last First MI

## Budget Information

Prorate Stipend and Allowances if Anticipated Tenure is Less Than 12 Months

Student Stipend (Maximum of \$16,000) \$ 16,000

### Student Allowance (**Itemize**) \*

Travel to conferences and seminars, health insurance, books, etc.

Student Allowance \$ 3,000  
(Maximum of \$3,000)

### University Allowance (**Itemize**) \*

Tuition & Fees expenses

University Allowance \$ 3,000  
(Maximum of \$3,000)

Total Requested \$ 22,000  
(Maximum of \$22,000)

\* Requested budget in these two categories may be exchanged, as long as the total sum for the two categories does not exceed \$6,000